

2019 Countryside Stewardship Grant Application

Appendix 1

The following SSSI units of Epping Forest have been assessed by Natural England as being in “Unfavourable No Change” or “Unfavourable Declining” condition. There is a six-yearly cycle for assessing the condition of SSSI units, so whilst work might have taken place recently, they may not be reflected in the current condition assessment. A summary of the reasons for unfavorability for each unit, as assessed by Natural England, is given below. Due to the reporting mechanism, several of the units have the same factors contributing to Unfavourable condition.

The condition reports often refer to excessive growth of brambles, grasses, nettles and depauperate moss species. Whilst it is not possible to definitely determine the reason for this, it is highly likely that these changes are linked to the deposition of nitrogen pollution. The poor condition of veteran trees is also likely, in part, to be linked to air pollution.

Unit 112 Tippa Burn: Unfavourable No Change

The heathland area of Dulsmead is being invaded by bracken and birch seedlings. There remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). Heathland areas show excessive growth of grass compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges.

Unit 117 High Beach: Unfavourable No Change

This SSSI unit supports a mosaic of Beech and Oak, Hornbeam wood pasture/woodland with wetland features (ponds and stream). Wood pasture stands have a higher canopy cover (80-95%) than optimal and Sycamore is locally frequent and competing with Beech regeneration in some areas. Pollarding, crown reduction and selective thinning with Sycamore removal would change the unit's condition to Unfavourable Recovering. Whilst veteran trees, moss and fungi assemblages are in favourable condition, the wetland features, notably Speakman's Pond, are in unfavourable condition due to dominance of the invasive non-native species *Crassula helmsii* which is suppressing other aquatic and marginal vegetation. This is resulting in low cover of submerged and marginal vegetation. It is recommended to significantly reduce *Crassula* and promote submerged and marginal vegetation through silt excavation and tree works.

Unit 125 Pole Hill: Unfavourable No Change

There remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). There is excessive growth of bramble, and grassland areas show excessive growth of grasses compared to broad-leaved species. In addition, the anticipated recovery in the condition of the grassland/ heathland areas will not take place unless an extensive grazing regime is re-introduced as planned.

Unit 130 Hatch Forest and Blue House Grove: Unfavourable No Change

The primary reason for unfavourability of this unit is believed to be air pollution and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). Mosses are sparse and only a few species are present, and there is excessive growth of bramble. A second reason for unfavourability is considered to be the level of recreational pressure to which this unit is exposed. However, in the absence of the air pollution, the habitats would probably be in a better condition to be able to cope with this pressure. In addition, although not directly affecting the favourability of the unit, the River Ching appeared to be polluted, possibly as a result of leakage or overflow from the sewer which passes through the unit.

Unit 230 Hatch Plain & Reed's Forest: Unfavourable No Change

The primary reason for unfavourability of this unit is believed to be air pollution and, in particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). Mosses are sparse and only a few species are present. There is excessive growth of bramble. Grassland areas show excessive growth of grasses compared to broad-leaved species, and there are dense stands of nettles along some of the roadsides.

Unit 133 Highams Park and The Sale: Unfavourable Declining

The primary reason for unfavourability of this unit is believed to be air pollution and, in particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). Mosses are sparse and only a few species are present. There is excessive growth of bramble. Grassland areas show excessive growth of grasses compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. Some of the water bodies within the unit are also in a sub-optimal

condition, which may affect the unit's long-term ability to provide supporting habitat for the assemblages of dragonflies and damselflies and of amphibians.

Unit 134 Walthamstow Forest (please note same condition assessment as Unit 133): **Unfavourable No Change**

The primary reason for unfavourability of this unit is believed to be air pollution and, in particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). Mosses are sparse and only a few species are present. There is excessive growth of bramble. Grassland areas show excessive growth of grasses compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. Some of the water bodies within the unit are also in a sub-optimal condition, which may affect the unit's long-term ability to provide supporting habitat for the assemblages of dragonflies and damselflies and of amphibians.

Unit 136 Leyton Flats: Unfavourable No Change

The primary reason for unfavourability of this unit is believed to be air pollution and, in particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (e.g. thin canopy and die-back of leading shoots). Mosses are sparse and only a few species are present. There is excessive growth of bramble. Grassland areas show excessive growth of grasses compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. A second reason for unfavourability is considered to be the level of recreational pressure to which this unit is exposed. However, in the absence of the air pollution, the habitats would probably be in a better condition to be able to cope with this pressure.